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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,711	06/27/2003	Prashant Gandhi	CISCP344/7838	7912
22434	7590	04/04/2007		
BEYER WEAVER LLP P.O. BOX 70250 OAKLAND, CA 94612-0250			EXAMINER QURESHI, AFSAR M	
			ART UNIT	PAPER NUMBER
			2616	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/04/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

59

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/607,711	GANDHI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Afsar M. Qureshi	2616	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 27 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/28/2005</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Drawings***

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because figures 1-7 are informal drawings. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 14-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Applicant is claiming a computer program with no requisite functionality present to satisfy the practical application requirement. Data structures not claimed as embodied in computer-readable medium are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer (see *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760).

Examples of acceptable language in computer-processing related claims:

Art Unit: 2616

- I. "computer readable medium" encoded with -----
  - [a] "a computer program"
  - [b] "a software"
  - [c] "computer executable instructions"
  
- II. "a computer readable medium" ----- "computer program"
  - [a] storing a
  - [b] embodied with a
  - [c] having a stored

Claims 14-21 will be examined on merit once the statutory status of the claims is established.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 2. Claims 1-10, 11, 12 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang (US 2002/0114334) in view of Haddock (US 6,970,426).

Claims 1-10, 11, 12 and 22.

Art Unit: 2616

Yang discloses a network device NAD 32 (see [0008]) and method for allocating bandwidth among various aggregation classes utilizing Token Bucket algorithm in a computer network. Each token bucket has a [maximum] capacity, once the desired serving rate of a token bucket is full a new token bucket (second token bucket) is added increasing the capacity of second bucket (see [0042]-[0043]) (claim 2). NAD 32 (fig.1) serves data packets in corresponding token bucket with the token generation rate equal to desired serving rate (see [[0036],[0043],[0049]]).

Yang, however, does not specifically disclose allocating excess first tokens to a second token bucket or to a third token bucket after determining a second time at which the second token bucket is approximately full of second tokens.

Haddock discloses token bucket C and token bucket E for excess burst size packets.

Haddock further discloses allocating excess first tokens to a second token bucket E if token bucket is less than full and when token bucket C is full (see col. 5, lines 30-63).

Haddock also discloses that this can be extended to more token buckets (see col. 7, lines 5-14). As to claims 6-8, Haddock discloses rate color marker scheme, a single rate three color marker, marking packets based on traffic rates, Committed information rates (CIR) and peak information rates (PIR) (see col. 1, lines 35-57) wherein the first token bucket C and second token bucket E both in color aware and in color-blind modes (see col. 7, lines 49-57)

Thus it would have been obvious to one of ordinary skill in the art, at the time of invention, to modify the invention by Yang by utilizing rate color marker scheme taught by Haddock and marking packets in the data stream differently to indicate a level of

assurance and quality of service in communication network. Yang is concerned with an efficient bandwidth management method and to improve download/arrival rates and upload/serving rates. The rate color marker scheme of Haddock will help eliminate bursty network traffic.

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Iverson et al. (US 6,456,593); Oldak et al. (US 7,085,236); Cheung (US 6,781,956).

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Afsar M. Qureshi whose telephone number is (571) 272 3178.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Field Lynn can be reached on (571) 272 2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business

Application/Control Number: 10/607,711

Page 6

Art Unit: 2616

Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**AFSAR QURESHI**  
**PRIMARY EXAMINER**

3/3//2007